

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ  
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ  
КАФЕДРА ІНОЗЕМНИХ МОВ  
ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ ЦЕНТР

**МАТЕРІАЛИ ХІ ВСЕУКРАЇНСЬКОЇ  
НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ  
СТУДЕНТІВ АСПІРАНТІВ ТА ВИКЛАДАЧІВ  
ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО  
ЦЕНТРУ КАФЕДРИ ІНОЗЕМНИХ МОВ**

**“TO MAKE THE WORLD SMARTER AND SAFER”**

(Суми, 23 березня 2017 року)

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
SUMY STATE UNIVERSITY  
FOREIGN LANGUAGES DEPARTMENT  
LANGUAGE CENTRE

**MATERIALS OF THE ELEVENTH  
ALL UKRAINIAN SCIENTIFIC PRACTICAL  
STUDENTS', POSTGRADUATES' AND INSTRUCTORS'  
CONFERENCE OF LANGUAGE CENTRE OF THE  
FOREIGN LANGUAGES DEPARTMENT**

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## ROBOTICS SERVING SURGERY

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In operating rooms of the future robotics will become an extension or substitution of surgeon hands. They are more acute and allow to provide operations via distant control.

In many cases doctors are made to perform operations being out of the optimal circumstances: with no access or little sizes of operational region, lack of vision area, importance of being maximum acute. Doctor must be mostly highly qualified and able to use several tools simultaneously. That's why using of surgical robot makes operations easier and risks lower. Such robots are being controlled by the high-qualified professionals who passed specialization in world robotics centers and know this device for good enough.

Most of operations before robotics era were performed in opened way or laparoscopically (minimal invasive surgery). Operations with robots both reduce cutting gap sizes and provide surgeon to access regions that it's unable to access without it. Indeed, robot enhances surgeon abilities to several times.

The most common operation performed with the surgery robots is complete deletion of prostate due to malignant tumor. Using of robots during this operation allowed to substitute one big cutting gap with four-to-six minimal gaps for robohands entering and laparoscopic access. Robot-surgeon also increases precision if surgeon's actions what decreases complications risks and chance to lost the control over urine.

Probably the most common robot for use in surgical medicine is Da Vinci Robot. It's serial robot for performing surgical operations by the American company Intuitive Surgery. Da Vinci Robot is adopted by several hundreds of clinics across the World.

Da Vinci Robot makes surgeon's actions more mobile and more accurate. As steel is more strong then bones and muscles, robohands are more powerful. Cameras on the hands of this robot give a closer 3D-look to the infected area.

So, Da Vinci Robot is a perfect tool-helper for every surgeon.